China and the Global Market for Forest Products: Transforming Trade to Benefit Forests & Livelihoods

Kerstin Canby
Forest Trends
Washington, DC * March 8, 2007
Varying projections of domestic production and China’s ability to be self-sufficient by 2015.

NDRC 2006: 150 million m³ gap between domestic supply of industrial roundwood and demand (domestic consumption + exports).

This gap to be addressed by:
• imports
• improvements in domestic production
• substitution
• greater efficiency
China’s Import Growth

Forest Product Imports to China, 1997-2006

- World leader in wood imports
- World’s leading importer of tropical wood
- 2 X increase in pulp, waste and recycled paper
- 3.5 X increase in timber

Source: Chinese Customs data
Global Context: Increasing Imports

World’s Top Industrial Roundwood Importers

Source: FAOstat and China Customs
China’s Timber Imports by Product Type

Logs & sawnwood up ** Plywood & veneer down

China's Timber Product Imports by Category

Source: Chinese Customs data
Total consumption of wood products has grown rapidly over the past decade.

Adapted from Figure 17 of Fuller, Bernard. 2006. China's Rapidly Expanding Wood Products Market: Are they Sustainable? Bedford, Massachusetts: Resource Information Systems Incorporated (RISI).
Drivers of Demand: Domestic Consumption

**GDP per capita and Paper Consumption**

- **Consumption 2000, kg per capita**
- **GDP per capita, USD 2000 prices**

Countries represented include:
- USA
- China
- New Zealand
- Sweden
- Belgium
- Canada
- USA
- Japan
- Austria
- Netherlands
- Denmark
- Germany
- Australia
- UK
- France
- Singapore
- Ireland
- Germany
- France
- Australia
- Italy
- Spain
- New Zealand
- Korea
- Malaysia
- Brazil
- Mexico
- Argentina
- South Africa
- Turkey
- Russia
- Venezuela
- China
- India
- China
- Brazil
- Mexico
- Argentina
- South Africa
- Turkey
- Russia
- Venezuela
- China
- India

Graph notes the correlation between GDP per capita and paper consumption across different countries.
Drivers of Demand: Export Demand

Imports
44.6 million m³
RWE

Exports
36.1 million m³
RWE

80% imported volume

China

Pulp and paper different story: only 11% is re-exported
Russian timber different story: majority stays in China itself

Mainly tropical timber processed into furniture, plywood that are exported
China’s Growth as a Wood Processing Center

Imports primary materials * Exports manufactured products

- Logs
- Lumber
- Wood chips
- Particleboard
- Veneer
- Fiberboard
- Plywood
- Wood furniture
- Other*

Million m3 RWE
China’s Timber Product Exports: Plywood and Furniture

- 364% increase by value ($13.1b)
- Wooden furniture & plywood +400, +1000%
- Logs & lumber stable
- Wood chips -50%

Diagram showing exports of various timber products from China from 1997 to 2006.
Int’l Demand for China’s Forest Product Exports (1997-2006)

Forest Product Exports (Volume)

- Total Wood-Based Product Exports
- Timber Product Exports
- Pulp and Paper Exports

Source: Chinese Customs data
Major Destinations of Chinese exports

Forest Product Exports by Destination (Value)

- **US +1000%**
- **EU +1000%**
- **Japan +180%**
- **Others +1200%**

Source: Chinese Customs data
Major Destinations: Plywood

1997-2006: 1,980% increase
2005-2006: 48%

Source: Chinese Customs data
# Largest Suppliers of Wood Products to China (2005)

<table>
<thead>
<tr>
<th>Timber Products</th>
<th>Logs</th>
<th>Lumber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>Russia</td>
<td>Russia</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Malaysia</td>
<td>USA</td>
</tr>
<tr>
<td>Indonesia</td>
<td>PNG</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Thailand</td>
<td>Myanmar</td>
<td>Thailand</td>
</tr>
<tr>
<td>PNG</td>
<td>Gabon</td>
<td>Malaysia</td>
</tr>
</tbody>
</table>

1. Russia<sup>1</sup> 49%  
2. Malaysia 8%  
3. Indonesia 6%  
4. Thailand 5%  
5. PNG 4%  

1. Russia<sup>1</sup> 68%  
2. Malaysia 6%  
3. PNG 6%  
4. Myanmar 4%  
5. Gabon 3%  

1. Russia<sup>1</sup> 26.4 million m³  
2. Malaysia 6%  
3. PNG 6%  
4. Myanmar 4%  
5. Gabon 3%  

1. Russia<sup>1</sup> 18%  
2. USA 14%  
3. Thailand 13%  
4. Indonesia 12%  
5. Malaysia 8%  

<table>
<thead>
<tr>
<th>Plywood</th>
<th>Wood Pulp</th>
<th>Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia 65%</td>
<td>Canada 27%</td>
<td>Taiwan 16%</td>
</tr>
<tr>
<td>Malaysia 21%</td>
<td>Indonesia 18%</td>
<td>USA 13%</td>
</tr>
<tr>
<td>Russia 3%</td>
<td>Russia 13%</td>
<td>S. Korea 12%</td>
</tr>
<tr>
<td>Japan 2%</td>
<td>Chile 10%</td>
<td>Japan 8%</td>
</tr>
<tr>
<td>Hong Kong 3%</td>
<td>US 10%</td>
<td>Indonesia 7%</td>
</tr>
</tbody>
</table>

<sup>1</sup> 20 million m³
# Largest Exporters of Wood Products to China (2005)

<table>
<thead>
<tr>
<th>Timber Products</th>
<th>Logs</th>
<th>Lumber</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Russia</td>
<td>49%</td>
<td>1. Russia</td>
</tr>
<tr>
<td>2. Malaysia</td>
<td>8%</td>
<td>2. Malaysia</td>
</tr>
<tr>
<td>3. Indonesia</td>
<td>6%</td>
<td>3. PNG</td>
</tr>
<tr>
<td>4. Thailand</td>
<td>5%</td>
<td>4. Myanmar</td>
</tr>
<tr>
<td>5. PNG</td>
<td>4%</td>
<td>5. Gabon</td>
</tr>
<tr>
<td>1. Russia</td>
<td>18%</td>
<td>2. USA</td>
</tr>
<tr>
<td>2. Indonesia</td>
<td>13%</td>
<td>3. Thailand</td>
</tr>
<tr>
<td>3. PNG</td>
<td>6%</td>
<td>4. Indonesia</td>
</tr>
<tr>
<td>4. Myanmar</td>
<td>10%</td>
<td>5. Malaysia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plywood</th>
<th>Wood Pulp</th>
<th>Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Indonesia</td>
<td>65%</td>
<td>1. Taiwan</td>
</tr>
<tr>
<td>2. Malaysia</td>
<td>21%</td>
<td>2. USA</td>
</tr>
<tr>
<td>3. Russia</td>
<td>3%</td>
<td>3. S. Korea</td>
</tr>
<tr>
<td>4. Japan</td>
<td>2%</td>
<td>4. Japan</td>
</tr>
<tr>
<td>5. Hong Kong</td>
<td>3%</td>
<td>5. Indonesia</td>
</tr>
</tbody>
</table>

1. Canada  27%  1. Taiwan  16%
2. Indonesia 18%  2. USA  13%
3. Russia  13%  3. S. Korea  12%
4. Chile  10%  4. Japan  8%
5. US  10%  5. Indonesia  7%
Russian Far East/Siberia:
- Significant resource base, but much is illegal and ecologically damaging

Malaysia:
- Malaysia increasingly concerned about reputation risk & being blamed for laundring illegal Indonesian lumber

Myanmar:
- Human rights abuses, illegality, corruption, harvesting organized by militants

Papua New Guinea
- Illegal logging, illegal labor, human rights abuses
  - Forest Department review World Bank audits confirm (2000-2005)

Thailand, Cambodia, VietNam:
- Natural forest being lost or threatened, intense social conflict-exclusion over land rights, pressure to increase plantations to supply China
Insecure supply and prices as:

- Natural forests dwindle in SE Asia (historical suppliers)
- Plantations are not yet on-line
- Potential for illegal logging campaigns increase (Indonesia 2005 government crackdown > 83% decrease in volume of merbau logs arriving in China)
- Russian log export taxes up to 80% by 2009

Environmental sensitivity in some of its fastest growing markets: EU, North America, Japan

Governmental Public Procurement Policies
- European countries, Japan, New Zealand
Sino-Russian Forest Products Trade
10% of overall trade between the two countries
Russia: #1 forest products supplier to China
China: Most important market for Russian timber
40 fold increase in log trade between 1996 – 2005

(a) similarity of wood species in the Russian Far East and northeast China
   (China’s traditional timber base);
(b) low prices and China’s decision to reduce tariffs (0% log import tariff);
(c) convenience in border trade and rail links between Russia and the
    neighboring Chinese provinces;
(d) favorable tax policies for border trade; and
(e) Russia’s resumption of maritime shipping of timber products in 2001, enabling
    Russia’s timber to be directly shipped to the major timber consuming regions
    on China’s eastern coast
### Largest Suppliers of Wood Products to China (2005)

<table>
<thead>
<tr>
<th>Timber Products</th>
<th>Logs</th>
<th>Lumber</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Russia&lt;sup&gt;1&lt;/sup&gt; 49%</td>
<td>1. Russia&lt;sup&gt;1&lt;/sup&gt; 68%</td>
<td>1. Russia 18%</td>
</tr>
<tr>
<td>2. Malaysia 8%</td>
<td>2. Malaysia 6%</td>
<td>2. USA 14%</td>
</tr>
<tr>
<td>3. Indonesia 6%</td>
<td>3. PNG 6%</td>
<td>3. Thailand 13%</td>
</tr>
<tr>
<td>4. Thailand 5%</td>
<td>4. Myanmar 4%</td>
<td>4. Indonesia 12%</td>
</tr>
<tr>
<td>5. PNG 4%</td>
<td>5. Gabon 3%</td>
<td>5. Malaysia 8%</td>
</tr>
</tbody>
</table>

<sup>1</sup> 26.4 million m³

<table>
<thead>
<tr>
<th>Plywood</th>
<th>Wood Pulp</th>
<th>Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Indonesia 65%</td>
<td>1. Canada 27%</td>
<td>1. Taiwan 16%</td>
</tr>
<tr>
<td>2. Malaysia 21%</td>
<td>2. Indonesia 18%</td>
<td>2. USA 13%</td>
</tr>
<tr>
<td>3. Russia 3%</td>
<td>3. Russia 13%</td>
<td>3. S. Korea 12%</td>
</tr>
<tr>
<td>4. Japan 2%</td>
<td>4. Chile 10%</td>
<td>4. Japan 8%</td>
</tr>
<tr>
<td>5. Hong Kong 3%</td>
<td>5. US 10%</td>
<td>5. Indonesia 7%</td>
</tr>
</tbody>
</table>
The Commodity Chain for Russian Softwood Imports to China

- ~80% consumed domestically mostly by construction sector

- ~20% for export to U.S., EU, Japan– over half from Chinese processors at border.

- Complicated supply chain creates challenges for timber tracking

Change Afoot: Russia’s Desire to Increase Value-Added Processing

- Proposed log export taxes increasing to 80% of exp value by 2009
- Incentives for investors in wood processing
  - No VAT to import processing equipment
- 2006: Russian and Chinese officials announce joint forestry venture in Siberia
- Many international investors, however, see Russia as a risky investment climate (new & uncertain Forest Code)
- CN MofCom recognizes need to ensure legal trade and investment relationships with major trade partners:
  - Need to combat “China Theory”: fear of Chinese domination in marketplace
  - Recognition that small-scale illegal Chinese operations have created a bad reputation for larger operations that would like to invest in Russia
Expanding RFE / Siberia production zones?

Developing countries say China is often prepared to help when traditional donors are not, and will sometimes pay over the odds, to secure natural resources. The west African state of Gabon, for example, after trying unsuccessfully for years to interest American and European investors in extracting its rich iron ore deposits, found China was eager.”


Sources: China Development Bank; World Bank.
Africa’s Forest Product Exports to China

China's Total Forest Product Imports from Africa By Type

Source: Chinese Customs data

S. Africa & Swaziland (99% pulp & paper)
**Top 5 African Log Suppliers to China (2005)**

*Important forest producing nations in West Africa do not export to China: Ivory Coast, Ghana*

Source: Chinese Customs data
Africa’s Share of China’s Timber Imports

Logs 2nd largest category of African exports to China (4.9%), following oil (62.2%)

Europe Still Dominate Importer of African Timber

Annual exports from natural tropical forest (1997-2005)

Source: J. Hewitt/COMTRADE
Objective: to slow down heated export-oriented economy or to promote domestic efficiency:

New tariff policy (Nov.1 2006)
- 10% temporary export tax on wood flooring, disposable chopsticks and wood chips

Cancelled or lowered export tax rebates (Sept. 15 2006)
- Reduction to 11% for wood packaging, wood doors & windows, plywood, laminated wood floorings
- Cancellation for charcoal, railway sleepers, wooden tools

5% consumption tax: solidwood floorings & disposable chopsticks (Mar 2006))

Green procurement policy- eco-labeling (Jan. 2007)
- The central & provincial governments are asked to give priority to products proven to be environment-friendly
- Standards target protection of consumers’ health, environment, energy & efficient, but nothing on legality or sustainability of wood source
Government Dialogues

– Signed Bali and St. Petersburg FLEG Declarations

– Bilateral MoUs with Russia, Indonesia and Myanmar

– State Forest Administration (SFA) has a new Trade Watch and Information Exchange Program

– Ministry of Commerce has up a task force working on “Sustainable Development: China and Global Markets”

– SFA plans to host an international conference on illegal logging in Summer 2007

– *In general: no concrete actions taken yet, not clear which ministry is the leading coordination body for the issue*
A Work in Progress

Thank you